

STOLICHUK, V.M.; YASHCHENKO, A.G.

Effect of stimulation of the cerebral cortex on the electric activity of the respiratory muscles of a cat. Fiziol. zhur. 49 no.11:1345-1352 1983. (MIRA 17:8)

1. Laboratoriya fiziologii dykhan'ya Instituta fiziologii imeni A.A. Bogomo'l'tsa AN UkrSSR, Kiev.

STORUZHUK, V.M.

On the evoked potential of the cerebral cortex with initial negativity. *Fiziol.zhur.* 50 no.1:20-25 Ja '64.

(MIRA 18:1)

1. Laboratoriya elektrofiziologii Instituta fiziologii imeni A.A. Bogomoletsa AN UkrSSR, Kiev.

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SECRET CODE: 001/21/25/27/29/31/33/35/37/39/41/43/45/47/49/51/53/55/57/59/61/63/65/67/69/71/73/75/77/79/81/83/85/87/89/91/93/95/97/99/101/103/105/107/109/111/113/115/117/119/121/123/125/127/129/131/133/135/137/139/141/143/145/147/149/151/153/155/157/159/161/163/165/167/169/171/173/175/177/179/181/183/185/187/189/191/193/195/197/199/201/203/205/207/209/211/213/215/217/219/221/223/225/227/229/231/233/235/237/239/241/243/245/247/249/251/253/255/257/259/261/263/265/267/269/271/273/275/277/279/281/283/285/287/289/291/293/295/297/299/301/303/305/307/309/311/313/315/317/319/321/323/325/327/329/331/333/335/337/339/341/343/345/347/349/351/353/355/357/359/361/363/365/367/369/371/373/375/377/379/381/383/385/387/389/391/393/395/397/399/401/403/405/407/409/411/413/415/417/419/421/423/425/427/429/431/433/435/437/439/441/443/445/447/449/451/453/455/457/459/461/463/465/467/469/471/473/475/477/479/481/483/485/487/489/491/493/495/497/499/501/503/505/507/509/511/513/515/517/519/521/523/525/527/529/531/533/535/537/539/541/543/545/547/549/551/553/555/557/559/561/563/565/567/569/571/573/575/577/579/581/583/585/587/589/591/593/595/597/599/601/603/605/607/609/611/613/615/617/619/621/623/625/627/629/631/633/635/637/639/641/643/645/647/649/651/653/655/657/659/661/663/665/667/669/671/673/675/677/679/681/683/685/687/689/691/693/695/697/699/701/703/705/707/709/711/713/715/717/719/721/723/725/727/729/731/733/735/737/739/741/743/745/747/749/751/753/755/757/759/761/763/765/767/769/771/773/775/777/779/781/783/785/787/789/791/793/795/797/799/801/803/805/807/809/811/813/815/817/819/821/823/825/827/829/831/833/835/837/839/841/843/845/847/849/851/853/855/857/859/861/863/865/867/869/871/873/875/877/879/881/883/885/887/889/891/893/895/897/899/901/903/905/907/909/911/913/915/917/919/921/923/925/927/929/931/933/935/937/939/941/943/945/947/949/951/953/955/957/959/961/963/965/967/969/971/973/975/977/979/981/983/985/987/989/991/993/995/997/999/1001/1003/1005/1007/1009/1011/1013/1015/1017/1019/1021/1023/1025/1027/1029/1031/1033/1035/1037/1039/1041/1043/1045/1047/1049/1051/1053/1055/1057/1059/1061/1063/1065/1067/1069/1071/1073/1075/1077/1079/1081/1083/1085/1087/1089/1091/1093/1095/1097/1099/1101/1103/1105/1107/1109/1111/1113/1115/1117/1119/1121/1123/1125/1127/1129/1131/1133/1135/1137/1139/1141/1143/1145/1147/1149/1151/1153/1155/1157/1159/1161/1163/1165/1167/1169/1171/1173/1175/1177/1179/1181/1183/1185/1187/1189/1191/1193/1195/1197/1199/1201/1203/1205/1207/1209/1211/1213/1215/1217/1219/1221/1223/1225/1227/1229/1231/1233/1235/1237/1239/1241/1243/1245/1247/1249/1251/1253/1255/1257/1259/1261/1263/1265/1267/1269/1271/1273/1275/1277/1279/1281/1283/1285/1287/1289/1291/1293/1295/1297/1299/1301/1303/1305/1307/1309/1311/1313/1315/1317/1319/1321/1323/1325/1327/1329/1331/1333/1335/1337/1339/1341/1343/1345/1347/1349/1351/1353/1355/1357/1359/1361/1363/1365/1367/1369/1371/1373/1375/1377/1379/1381/1383/1385/1387/1389/1391/1393/1395/1397/1399/1401/1403/1405/1407/1409/1411/1413/1415/1417/1419/1421/1423/1425/1427/1429/1431/1433/1435/1437/1439/1441/1443/1445/1447/1449/1451/1453/1455/1457/1459/1461/1463/1465/1467/1469/1471/1473/1475/1477/1479/1481/1483/1485/1487/1489/1491/1493/1495/1497/1499/1501/1503/1505/1507/1509/1511/1513/1515/1517/1519/1521/1523/1525/1527/1529/1531/1533/1535/1537/1539/1541/1543/1545/1547/1549/1551/1553/1555/1557/1559/1561/1563/1565/1567/1569/1571/1573/1575/1577/1579/1581/1583/1585/1587/1589/1591/1593/1595/1597/1599/1601/1603/1605/1607/1609/1611/1613/1615/1617/1619/1621/1623/1625/1627/1629/1631/1633/1635/1637/1639/1641/1643/1645/1647/1649/1651/1653/1655/1657/1659/1661/1663/1665/1667/1669/1671/1673/1675/1677/1679/1681/1683/1685/1687/1689/1691/1693/1695/1697/1699/1701/1703/1705/1707/1709/1711/1713/1715/1717/1719/1721/1723/1725/1727/1729/1731/1733/1735/1737/1739/1741/1743/1745/1747/1749/1751/1753/1755/1757/1759/1761/1763/1765/1767/1769/1771/1773/1775/1777/1779/1781/1783/1785/1787/1789/1791/1793/1795/1797/1799/1801/1803/1805/1807/1809/1811/1813/1815/1817/1819/1821/1823/1825/1827/1829/1831/1833/1835/1837/1839/1841/1843/1845/1847/1849/1851/1853/1855/1857/1859/1861/1863/1865/18

Authors: Glazunov, B. L. (Docent); Chervyakova, K. I. (Candidate of biological sciences); Nguyen Van N'yt (Aspirant); Velyayevskaya, M. Ye. (Engineer); Kaushanskaya, L. I. (Engineer); Storozhuk, V. N. (Engineer); Terletskaia, L. A. (Engineer); Zaynberg, S. G. (Engineer)

55: none

1972: Search for new operating conditions in sterilization of canned goods for projected continuously operative equipment

projected continuously operative equipment

TOPIC TAGS: food technology, food preservation, food sterilization, applied mathematics, food product machinery, processed plant product

ABSTRACT: New operative conditions for sterilizing tomato juice in an Qlessa factory were worked out at the Qlessa Technological Institute for the Food and Refrigeration Industry, based on a continuous operation (see Figure 1) with successive heating and cooling of 0.5 and 0.2 liter bottles filled with juice at 80-85 C and immersed in water of various temperatures. The sterilization temperatures tested were 100, 95, and 92 C. Temperatures in the bottle center were measured with a thermocouple. The

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ACC NR: A76027156

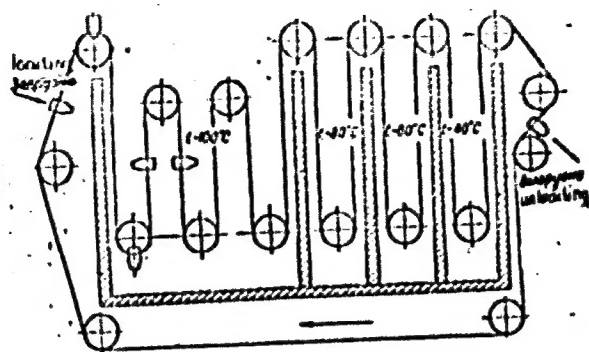


Figure 1. Schematic representation of continuous sterilization

data were mathematically processed according to Flaumenbaum, B. L. (Pishcheyevs technology, 3, 1959). Earlier studies on survival of microorganisms in tomato juice were also considered. The formulas arrived at were experimentally tested. The general formula applied was $A = \psi(K_A + K_A + K_A + \dots + K_A)$.

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... sterilizing effect, T is the time interval during which temperature in the bottle center is recorded, K_A is the peroxidizing coefficient. The value of K_A was determined as a reliable indicator for sterilization, preferable to that of the "heat number". The tests had determined 25 min for 90 C or 15-20 min for 95 C. The tests found that the same K_A effect could be obtained 16% faster at 100 C for the 0.5 liter bottle and 11% faster for the 0.2 bottle at the same temperature. For the other temperatures, sterilization time figures were comparable to or higher than the older ones. Microbiologic tests of the sterilization formulas with juice infected with *Penicillium*, *Aspergillus niger*, yeasts and *Bac. mesentericus ruber*, then sterilized according to formula and kept at room temperature for 3 months or at higher temperatures for 4-8 days, gave satisfactory results. The formulas worked out are for 90, 95 and 92 C and for the 2 sizes of bottles. Thus for 0.2 liter bottles the formula is 0-10-5-5-5/100 C, where the first figure indicates that the sterilization process proper is starting, the second gives the sterilization period, in the third, fourth and fifth give stopwise cooling in water baths of 80, 60 and 40 C. It was concluded that the formulas found had been proved reliable in microbiological tests. Orig. art. has: 10 figures and 8 formulas.

REF ID: A6, 63/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 001

... 2/2

STOROZHUK, Ya.P., kand. tekhn. nauk; SVYATSKIY, Z.M., kand. tekhn. nauk

Burning fuel oil in the combustion chamber of gas-turbine
installations. Energomashinostroenie 4 no.10:24-28 0 '58.
(Gas turbines) (MIRA 11:11)

34922

S/114/62/000/003/001/005
E194/E155

26.7130

AUTHOR: Storozhuk, Ya. P., Candidate of Technical Sciences

TITLE: The operation of multi-swirler gas-turbine
combustion chambers burning liquid fuel

PERIODICAL: Energomashinostroyeniye, no.3, 1962, 3-7

TEXT: As combustion tube diameters increase, the effective-
ness of single swirlers falls off and combustion efficiency is
impaired; accordingly multiple swirlers are being used with
large combustion chambers. The TsKTI has tested three
geometrically similar combustion chambers with flame tube
diameters of 640, 510 and 400 mm. The tubes were made of steel
3A1T (EYalT), and the tube head carried five cylindrical
swirlers with profiled blades installed at an angle of 60°. Below
the head came five conical shells which overlapped with
gaps between to admit cooling air. Air from the compressor
having passed through the air heater is delivered to the bottom
of the chamber outside the flame tube. It enters the tube
partially through a mixer located below the conical shells, partly
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The operation of multi-swirler ...

S/114/62/000/003/001/005
E194/E155

through the gaps between the conical shells and partly through the head. To improve cooling, the top two shells were ribbed and then firing rates of about 30×10^6 kcal/m³ hour.atm could be achieved with satisfactory combustion. When necessary the primary and secondary air supplies could be kept separate. The temperature distribution was measured and gas samples were analysed. The tests were run on diesel fuel with excess-air factors between 1 and 2, with an inlet air temperature of 100 to 300 °C at an inlet pressure of 1.25 to 3.8 atm, with a fuel consumption of 136 to 490 kg/hour and an exhaust gas temperature of 680 to 700 °C. Single-stage centrifugal nozzles were used. The process of fuel combustion was practically identical in all three chambers over a wide range of gas flows. To assess the effect of pressure, tests were run in which the pressure alone was varied, usually between 1.5 and 3 atm, and within this range the nature of combustion was identical for all the chambers tested. In multi-swirler combustion chambers the fuel is well mixed with primary air; combustion is complete near the burner throat and the flame temperature is high. The main factors that

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E194/E155

limit the rate of firing are the chamber diameter and the rate of air flow at discharge from the swirlers, which governs the turbulence. The smaller the chamber diameter (and naturally, therefore, the swirler diameter) the greater the maximum possible rate of firing for a given rate of gas flow. The combustion efficiency can be represented in terms of the same parameters as those used by E.G. Woodward (Ref. 2: Sixth Symposium on Combustion, Reinhold Pub. Corp., 1957), provided that they are written in terms of the rate of flow of air (by weight) at discharge from the swirlers. The distribution of air between different parts of the combustion chamber is discussed. As the ratio of the air inlet to the discharge temperature alters, the air distribution alters because of differential expansion of the chamber body and the fire tubes. The cooling air was not uniformly distributed among the slots between the conical shells; and because the expansion is greatest where the metal is hotter, the parts that require most air receive least. This point should be allowed for in design. The flow structure was identical in different geometrically similar combustion chambers. The axial velocity

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X

The operation of multi-swirler ...

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E194/E155

distribution is practically symmetrical across the chamber section. The tests provide a qualitative assessment of the processes of mixing of individual layers of gas-air mixture with pulverized fuel and so make it possible to assess their influence on the process of combustion stabilisation in multi-swirler chambers.
There are 7 figures.

Card 4/4

X

S/11./62/000/004/001 '008
E114/235*

Heat radiation from ...

by Dr - Al [Abstractor's Note: obviously a printing error for chromel-alumel] thermocouples embedded in the cylindrical segments of which the wall was composed. One series of experiments was conducted at a constant Reynold's number in annular cooling air gaps and at varying pressures and thermal loadings. The temperature of the ribbed segments near the burner decreased along their length, while the smooth segments further away from the burner remained at a uniform temperature, which was higher although the intensity of radiation there was less. The increase of pressure caused increase in temperature throughout the length of the flame tube. The second series of experiments was conducted at a constant thermal loading, excess air and inlet air temperature with Reynold's number in the first annular gap were left to vary with pressure. Although quantity of cooling air increased with pressure, the temperatures of the burner head and the first segments which were opposite the zones of incomplete combustion rose

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S/114/82/000/004/001/008
S114/8054

Heat radiation from ...

considerably. Temperature difference of the order of 300°C was found to exist along the length of the segment nearest the burner. It is recommended, therefore, to insulate the cold parts of segments forming the flame tube from the parts exposed to radiation. Cooling ribs were found to be effective. The temperature of the flame tube was greatly influenced by convection currents on the flame side and by the passage of air through annular gaps. Inside the tube cooling improved by the dilution of hot gases by cooling air entering through the annular gaps. Heat conducted away from the walls by convection was approximately given as $Nu = 0.031 Re^{0.8}$, where Re is the effective Reynold's number. A nomogram is given to determine the maximum temperature of the flame tube segments. There are 10 figures.

X

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STOROZHUK, Ya.P., kand.tekhn.nauk; ANTONOVSKIY, V I, inzh.

Methods for calculating the maximum temperature of the flues of
the combustion chambers of gas turbine systems operating on liquid
fuel. Energomashinostronika 9 no.1:47-48 Ja '63. (MIRA 16:3)
(Gas turbines)

ACCESSION NR: AP4007443

S/0096/64/000/001/0059/0063

AUTHOR: Storozhuk, Ya. P. (Candidate of technical sciences);
Asoskov, V. A. (Engineer)

TITLE: Problem of approximate modeling of the combustion processes
in a GTU [gas turbine unit] combustion chamber

SOURCE: Teploenergetika, no. 1, 1964, 59-63

TOPIC TAGS: gas turbine, combustion chamber, combustion process,
combustion process modeling, liquid fuel combustion

ABSTRACT: Similitude laws for scaling-up gas turbine combustion
chamber models to full-scale units are analyzed on the basis of a
generalized relationship for the combustion efficiency in terms of
fuel droplet residence time in the combustion zone; full combustion
time; evaporation, mixing, and burning times; Reynolds, Karman, Mach,
and Prandtl numbers; fuel and air temperatures; air excess factor,
and activation energy. From a previously derived relationship for
the evaporation time (Yu. Kh. Shaulov, M. O. Lerner. Gorennye v
zhidkostnykh reaktivnykh dvigatelayakh. Oborongiz, 1961) the

Contd 1/4

ACCESSION NR: AP4007443

following criterion for the complete evaporation was derived:

$$\tau_{ev} = \frac{C d_k^2 w_{av}}{L_{fl}}$$

where C is $\gamma 273/8 D_{po}(t_k + 273)$, d_k is the characteristic droplet diameter, L_{fl} is the flame-tube length, t_k is the vapor temperature, γ is the specific weight of fuel, D_{po} is the diffusion coefficient at 0°C and 1 atm, and w_{av} is the average gas flow velocity. The invariance of the ratio of mixing time to residence time with respect to Re , Ka , M , and Pr is examined, and self-modeling regions of Re and Ka are defined. It is concluded that for modeling of a diffusional combustion process in chambers operating under self-modeling regimes with respect to Re and Ka , the following conditions must be fulfilled: 1) the model and the full-scale unit must be geometrically similar; 2) the fuel must be of the same type and have the same temperature; and 3) the fuel-air ratios, the temperatures of air and combustion products, and the evaporation criterion τ_{ev} must be identical. The

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. ACCESSION NR: AP4007443

results are illustrated by data obtained previously (Ya. P. Storozhuk, "Energomashinostroyeniye, No. 3, 1962) by the combustion of atomized solar oil in high-output combustion chamber models 0.61, 0.51, and 0.4 m in diameter. The graphs (see Fig. 1 of Enclosure) show that the combustion process was almost identical in all three chambers when the specified modeling conditions were fulfilled. Orig. art. has: 17 formulas, 3 figures, and 2 tables.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut (Central Boiler-Turbine Institute)

SUBMITTED: 00

DATE ACQ: 23Jan64

ENCL: 01

SUB CODE: PR

NO REF SOV: 003

OTHER: 000

Card 3/4

S/0096/64/000/002 '0039/0042

ACCESSION NR: APL012339

AUTHORS: Storozhuk, Ya. P. (Candidate of technical sciences); Antonovskiy, V. I. (Engineer)

TITLE: A study of the emissive properties of a flame in a single damper combustion chamber of a gas turbine

SOURCE: Teploenergetika, no. 2, 1964, 39-42

TOPIC TAGS: flame emission, combustion chamber, air pressure, excess air coefficient, emission distribution, flue cooling, platinum platinum rhodium thermocouple, vacuum radiation thermal element, thermal radiation flux, gas blackness, infrared radiation

ABSTRACT: One of the problems which arose with the construction of the experimental gas turbine combustion chamber was the cooling of the flue metal. The development of a reliable method for calculating the wall temperature was hampered by the absence of experimental data on the emission characteristics of flame. Experiments were conducted varying several parameters (principally the air pressure and the coefficient of excess air). The chamber had a divided air supply for

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ACCESSION NR: APh012339

independent control of primary and secondary air. Two types of flues were studied, both 364 mm in diameter and joined to a transition cone. One flue was continuous, the other in 3 sections, with a 4-mm annular gap between sections. For experimental purposes 2 dampers with a 45° and 52° tilt were available. Diesel fuel was sprayed from a centrifugal single-stage jet with a 75° flame. The variables of the air and fuel, the flame temperature, the normal total thermal radiation and gas composition were measured. The latter three were taken at the same cross section at 4 points along the flue. The flame temperature was measured with a suction platinum-platinum-rhodium thermocouple. The gross flame radiation (luminous brightness) was measured with a vacuum radiation thermal element (RTE) with 2 sensitive elements, one of which was used for comparison of the surrounding temperature. It was sensitive to infrared radiation in the band 0.18-11 μ which was suitable according to the standards of D. I. Weeks and O. A. Saunders (Journal of the Inst. of Fuel, No. 209, 1958). The prescribed normal operating conditions were: volumetric thermal stress; $4 - 8 \times 10^6$ large calories/ $m^3 \cdot hr$ atmosphere, excess coefficient of primary air $\alpha_1 = 1.15-1.8$, air flow rate up to 5500 kg/hr, air temperature at chamber inlet $t_p = 60-200C$, pressure in the chamber $p = 1.05-2.03$ atmospheres, and temperature of exhaust gases $t_{ex} = 500-740C$. The experimental installation permitted variation of each parameter. The first studies varied

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ACCESSION NR: APh012339

the excess air coefficient. The radiation increased to a greater extent in the initial sections of the flue and with lower air ($\alpha = 1.2-1.5$). An increase in the intake air temperature led to a decrease in the radiation at the measuring points as a result of the shifting of the active combustion zones to the flame root. The next study (conducted only on the segmented flue) varied the chamber pressure. The radiation sharply increased with an increase in pressure at the first 2 measuring points, especially with a small α_1 . Both damper settings were studied, and it was found that the larger angle setting caused more turbulence and shifted the maximum temperature zone (and thus radiation) to earlier stages of the chamber. The radiation at the end of the chamber was due to H_2O and CO_2 and could be determined from graphs and formulas for nonluminous gases. Measured values exceeded a calculated value by 20-30%. This was attributed to variation in the temperature and in the composition of the gas and also to the presence of soot particles. The degree of blackness of the flame was determined from measured radiation and the calculated flame temperature. The experimental blackness values were 0.4-0.06, with their maximum values in the initial sections of the flue. The blackness at the end of the chamber was 0.08-0.06, which exceeded by 20-30% the value for pure 3-atom gases. The total degree of blackness of the flame was presented, using the principle of Buger-Baer. The coefficient of absorption was

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ACCESSION NR: APL012339

the sum of the coefficient of absorption of soot particles and 3-atom gases. The total coefficient of absorption was found to depend linearly on the pressure. Orig. art. has: 2 figures, 4 graphs, and 5 equations.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut (Central Steam Turbine Institute)

SUBMITTED: 00

.EXCL: 00

SUB CODE: FP, OP

NO REF SOV: 002

.OTHER: 001

Card 4/4

ACCESSION NR: AP4041873

S/0170/64/000/007/0087/0090

AUTHOR: Storozhuk, Ya. P.; Antonovskiy, V. I.

TITLE: Determination of the hemispherical radiation flux of a flame by a radiometer with a small angle of view

SOURCE: Inzhenerno-fizicheskii zhurnal, no. 7, 1964, 87-90

TOPIC TAGS: combustion chamber, flame tube, gas turbine, heat radiation

ABSTRACT: A method was developed for determining the hemispherical radiative heat flux passing from a flame to the inner surface of a cylindrical combustion chamber of a gas turbine. The method makes use of calorific brightness values experimentally determined with a radiometer in several cross sections at different flame thicknesses, i.e., with a movable cold background. Experiments and calculations were made with a combustion chamber (364 mm in diameter and 950 mm long) which was operated near atmospheric pressure with solar oil as fuel. The calculation of the heat flux is reduced to the determination of the parameter ϕ which accounts for the chamber

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ACCESSION NR: AP4041873

geometry and the nonuniformity of the emission characteristics inside the flame. For ratios of chamber length to diameter of 0.48, 0.9, and 2.3, the values of ϕ were 0.75—0.76, 0.82—0.86, and 0.69—0.79, respectively. The scattering of ϕ at a given relative distance from the register is caused by differences in primary air excess factors, which ranged from 1.2 to 1.6. Orig. art. has: 2 figures and 16 formulas.

ASSOCIATION: Tsentral'nyy kotloturbinnyy institut im. I. I. Polzunova, Leningrad (Central Boiler Institute)

SUBMITTED: 22Apr63

ATD PRESS: 3074

ENCL: 00

SUB CODE: PR, TD

NO REF SOV: 000

OTHER: 000

Card 2/2

STOROZHUK, Ya.P., kand. tekhn. nauk; PAVLOV, V.A., inzh.

Gas and fuel oil burners with increased range of regulation.
Energomashinostroenie 10 no.2:20-23 P '64. (MIRA 17:6)

YU. I. K., Yul. I., kum. tekh. nauk; A. G. SKUT, V. A., inzh.

Approximate simulation of combustion in the combustion chambers
of a gas turbine system. Teploenergetika 11 no. 1:59-63 Jan 1964.
(MIRA 17:5)

1. Tsentral'nyy kotloturbinnyy institut.

"APPROVED FOR RELEASE: 08/26/2000

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L 12413-55 ENT(M)/T ~~W/JW/WE~~
ACC NR: AF6004169 (N)

SOURCE CODE: UR/0096/66/000/002/0028/0032

AUTHOR: Pavlov, V. A. (Engineer); Storozhuk, Ya. P. (Candidate of technical sciences)

ORG: Central Boiler and Turbine Institute (Tsentral'niy kotloturbinniy institut)

TITLE: Simplified method for determining dispersion of atomized liquid fuel || 25

SOURCE: Teploenergetika, no. 2, 1966, 28-32

TOPIC TAGS: fuel injector, fuel atomization, liquid fuel

ABSTRACT: The selection of the proper method for determining the dispersion of atomized liquid fuel greatly effects the correct evaluation of the performance of fuel injectors and combustors. Existing methods involve complex data reduction processes. The proposed method, based on the determination of the maximal diameter of an atomized fuel droplet in a sample, is simple and permits the use of existing sampling methods. The maximal diameter of the droplet can be calculated or determined graphically from the plot of the following function: $\lg n = f(\delta^2)$, where n is the number of droplets and δ is the droplet diameter measured experimentally. The use of the proposed method is illustrated with concrete examples. Orig. art. has: 17 formulas and 4 figures. [AS]

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 004/ OTH REF: 002/ ATD PRESS: 4206

Card 1/1 net

UDC: 621.43.037.001.1

1. 1140-65

ACCESSION NR: AP5006296

zones. The concentration was maximum close to the chamber head. The mean values of the concentration calculated with consideration of the temperature distribution field are 0.55—0.75 of the maximum value. A pressure increase leads to less complete combustion in the head part of the combustion chamber. This occurs even if the entire combustion process ends at the same or a smaller distance from the flame tube. An empirical relationship was derived for the soot particle concentration. Orig. art. has: 18 formulas and 5 figures. [AC]

ASSOCIATIONS: Tsentral'nyy kotloturbinnyy institut (Central Boiler and Turbine Institute)

SUBMITTED: 00

ENCL: 00

SUB CODE: PR

NO REF SOV: 003

OTHER: 002

ATD PRESS: 3201

Card 2/2

ANTONOVSKIY, V.I., inzh.; STOROZHUK, Ya.P., kand. tekhn. nauk

Radiation of the flame in the combustion chambers of gas turbine systems operating on liquid fuel. Teploenergetika 12 no.3: 41-47 Mr '65. (MIRA 18.6)

1. Tsentral'nyy kotloturbinnyy institut.

ACC NR: AP6009723 SOURCE CODE: UR/0114/66/000/003/0008/0011

AUTHOR: Pavlov, V. A. (Engineer); Storozhuk, Ya. P. (Candidate of technical sciences)

ORG: none

TITLE: Calculation and design of mechanical injectors

SOURCE: Energomashinostroyeniye, no. 3, 1966, 8-11

TOPIC TAGS: fuel injector, mechanical fuel injector, fuel atomization

ABSTRACT: A method is proposed for calculating the basic geometric parameters of a mechanical fuel injector. Formulas are given for determining the injector nozzle diameter, swirl chamber diameter, total area of tangential ducts, and the number of ducts. The derived formulas are based on experimentally determined performance characteristics of a number of fuel injectors of various designs. The use of the method is illustrated by a numerical example. Orig. art. has: 14 formulas and 4 figures. [AS]

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 003/ OTH REF: 001
ATD PRESS: 222

Card 1/1

UDC: 621.43.037.001.24

L 22232-65 EPF(m)-2/EWT(m)/LTC(m)-6/2/EWF(1) WA/JW/WE

ACC NR: AFG007309

UR/0096/66/000/003/0063/0068 78

AUTHOR: Storozhuk, Ya.P. (Candidate of technical sciences); Asoskov, V.A. (Engineer)

ORG: Central Boiler and Turbine Institute (Tsentral'nyy kotloturbinnyy institut)

TITLE: Investigation of the combustion process^{//} of a liquid fuel^{//2} in the combustion chamber of a gas turbine installation with variable pressure

SOURCE: Teploenergetika, no.3, 1966, 63-68

TOPIC TAGS: combustion gas dynamics, gas turbine engine, combustion chamber, flow structure, combustion mechanism, liquid fuel

ABSTRACT: The combustion rate is determined by the rate of the slowest stage; it is therefore possible that, with changes in the operating conditions of the combustion chamber over wide limits, and also with changes in the geometric characteristics of the chamber and the type of fuel, one of the limiting stages may be replaced by another. In the article, the mathematic treatment of the problem is based on data from full scale gas turbine installations. Calculated results are exhibited in a series of curves. The effect of the aerodynamic characteristics on the combustion process is experimentally established, as well as the independence of the flow structure of the pressure of the medium at identi- 2

Card 1/2

UDC: 621.438.621.43.056.001.5

L 22289-66

ACC NR: AP6007309

cal blowing rates. A relation is established for the completeness of combustion as a function of the pressure; this permits the conclusion that the limiting stage in the combustion of liquid fuels with a drop size greater than 100×10^{-6} meters is the vaporization of the drops. There is also established an experimental relationship for the dependence of the completeness of combustion on the parameter which characterizes the relative vaporization time of the drops; this makes it possible to determine the completeness of combustion chamber. Orig. art. has: 14 formulas 7 figures and 1 table.

SUB CODE: 21/ SUBM DATE: none/ ORIG REF: 004

Card 2/2 not

MAKHAROVA, N.G.; STOMZHUK, Ya.D.

Methods of determining the bread content in ground-seal dishes.
Zh. fit. 23 no.5:81 S=0 '64. (MIRA 18:5)

1. Yantsevtokskaya gorodskaya sanitarnoo-biologicheskaya
st. 194.

VAKHURIN, A.A., inzh.; VILKOV, N.I., inzh.; SIBIRSKY, Yu.G., inzh.; POLICHEN, V.A., inzh.; MELAMED, N.P., inzh.; FOMIN, T.I., inzh.; GOLYUZITSKY, G.G., inzh.; TAGIROVA, N.I., inzh.; SHIFMAN, O.I., inzh.; STOKS, A.A., inzh.; VAKHURIN, A.A., inzh., otv. za vypusk; KHITROV, F.A., tekhn. red.

[Safety engineering regulations for operating traction substations and section lization posts of electrified railroads]Pravila tekhniki bezopasnosti pri ekspluatatsii tiagovykh podstantsii i postov sektiionirovaniia elektrifitsirovannykh zheleznykh dorog. Moskva, Transzheldorizdat, 1962. 202 p.

(MIRA 15:8)

1. Russia (1923- U.S.S.R.)Glavnoye upravleniye elektrifikatsii i energeticheskogo khozyaystva. 2. TsE Ministerstva putey soobshcheniya (for Khlebnikov). 3. Tsentral'nyy komitet profsoyuza (for Fomichev). 4. Morskovskaya zheleznaya doroga (for Kolyuzhnyy). 5. Sverdlovskaya zheleznaya doroga (for Tagirova). 6. Yuzhno-Lyal'skaya zheleznaya doroga (for Shifman). 7. Zapadno-Sibirskaya zheleznaya doroga (for Stokts).

(Electric railroads--safety regulations)

"APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653410018-2

1. The first part of the document is a list of the names of the persons who were present at the meeting. The names are listed in alphabetical order. The names are: [illegible]

APPROVED FOR RELEASE: 08/26/2000

CIA-RDP86-00513R001653410018-2"

STORTS, P.A.

A flax binder. Trudy MIMESKH n no.2:88-106 '59. (MIRA 15:4)
(Flax) (Harvesting machinery)

ST. RUBLENKOV, Vladislav Pavlovich; FEDOROV, B.F., red.; SYCHEVA,
V.A., tekhn. red.

[The lights of the beacons are burning] Goriat ogni maiakov.
Murmansk, Murmanskoe knizhnoe izd-vo, 1962. 39 p.

(MIRA 16:6)

(Murmansk region--Fisheries--Labor productivity)

STOS', V.

Collective Farms - Accounting

Accounting of fulfillment of collective farm estimates on expenditures of capital investments. Kolkh.proiz., 12, No. 8, 1952.

9. Monthly List of Russian Accessions. Library of Congress, ~~November 1952~~ 1977, Uncl.

STOSH, I.I., *grogadir-shtukatur*

Continuous method for separate steps in dry well construction
using guide marks and gypsum patches. Rate. 1 izobr. predl. v
strel. no.2:65-69 '57. (MIRA 11:1)
(Plastering)

34

PHASE I BOOK EXPLOITATION

501/5199

Unkov, Ye.P., Doctor of Technical Sciences, Professor, Ed.

Sovetskoye sostoyaniye kuznechno-shtampovogo proizvodstva (Present State of the Pressworking of Metals) [Moscow] Mashgiz, 1961. 433 p. 5000 copies printed.

Ed. of Publishing House: A.I. Sirotin; Tech. Ed.: B.I. Medel'; Managing Ed. for Literature on the Hot Working of Metals: S.Ya. Golovin, Engineer.

Title: Kuznechno-shtampovoye proizvodstvo v SSSR (The Pressworking of Metals in the USSR) by: A.V. Altykis, D.I. Berezhkovskiy, V.P. Volkovitskiy, I.I. Gira (deceased), L.D. Gol'man, S.P. Granovskiy, N.S. Dobrinskiy, A.I. Zimin, S. L. Zibtnikov, A.I. Kaganovskiy, P.V. Lobachev, V.N. Martynov, Ye.N. Koshnina, G.A. Nevrotskiy, Ya.M. Otkrivanenko, G.N. Rovinskiy, Ye.A. Stosha, Yu.L. Rozhdestvenskiy, M.V. Tikhosirov, Ye.P. Unkov, V.P. SHERGILOV, and L.A. Shofman; Eds: Ye.P. Unkov, Doctor of Technical Sciences, Professor, and B.V. Rozanov.

Title: Kuznechno-shtampovoye proizvodstvo v CSSR (The Pressworking of Metals in the Czechoslovak SR) by: S. Burda, F. Hrazdil, F. Drastik, F. Zlatohlavek

Card 1/8

1. Introduction (Cont.)

200/279

2. Editorial, V. Kuznetsov, V. Kuznetsov, V. Kuznetsov, K. Kuznetsov, J. Kuznetsov, J. Kuznetsov, V. Kuznetsov, K. Kuznetsov, K. Kuznetsov, V. Kuznetsov, V. Kuznetsov, and J. Kuznetsov; Editor: A. Kuznetsov, and K. VIK.

REMARKS: This book is intended for engineers and scientific personnel concerned with the pressworking of metals.

COMMENT: Published jointly by Mashinist and SNTKh, the book discusses the present state of the pressworking of metals in the USSR and the Czechoslovak Socialist Republic. Chapters were written by both Soviet and Czechoslovak writers. No personalities are mentioned. There are 129 references: 93 Soviet, 16 English, 8 German, 5 Czech, and 2 French.

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501/5772

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301/579

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Ch. VIII. Scientific Research Work in the Field of Cold Impact Forging of Metals [F. Hrdáčil, Plant Ineni Šumol, Brno]		355
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Card 7/8

MANISHEV, L.M.; GUBERT, J.V.; CHARIKHOV, L.A.; VOSKOBOYNIKOV, V.O.; STOGHA,
Ye.A.

For an overall mechanization and a widespread automation in metallurgy.
Metallurg 9 no.6:1-3 1964. (IRA 17:9)

1. Direktor Gosudarstvennogo soyuznogo instituta po proyektirovaniyu agregatov staleliteynogo i prokatochnogo proizvodstva dlya chernoy metallurgii (for Manishev). 2. Direktor Gosudarstvennogo soyuznogo instituta po proyektirovaniyu metallurgicheskikh zavodov (for Gubert). 3. Glavnyy inzh. Tsentral'noy laboratorii avtomatiki (for Charikhov). 4. Zamestitel' direktora Instituta novoy metallurgicheskoy tekhniki Tsentral'nogo nauchno-issledovatel'skogo instituta chernoy metallurgii im. I.P. Bardina (for Voskoboynikov). 5. Zamestitel' direktora Vsesoyuznogo nauchno-issledovatel'skogo i proyektirovannokonstruktorskogo instituta metallurgicheskogo mashinostroyeniya (for Stogha).

STOSHICH, H.

YUGOSLAVIA/Diseases of Farm Animals. Diseases Caused by
Viruses and Rickettsiae.

Abs Jour: Ref Zhur-Biol., No 2, 1958, 40615.

Author : Shebetich, Ch., Nikolich, B., Tokin, I., Mila-
novich, A., ~~Stoshich, H.~~, Khadzhinikolich, V.

Inst :

Title : Usefulness of the Combining and Complementing
Reaction Method According to Altar, Serra and
Guarini in Infectious Anemia Diagnosis of Soliped
Animals.

Orig Pub: Acta veterin., 1957, 7, No 1, 33-46.

Abstract: On the basis of their investigations, the authors
came to the conclusion that the modified combining
and complementing reaction according to Altar does
not prove to be a true antigen and antibody reaction

Card : 1/2

9

SIASS, Bureau of Agricultural Research, and the Department of Agriculture

Nuclear research and training in farming. Nuclear Georgia
1960.11.16 JI 164.

1. Institute for the Application of Nuclear Energy in Agriculture,
University of Georgia, and Forestry, Zveny

Page 11, line 1

Patenting of Swiss Patent 1,111,111, 1-0-1-1.

STOSIC, Darko, dr (Sinina 22a, Beograd); RUZICIC, Nikola, dr, redovni profesor; MILOSEVIC, Ferisa, dr, docent; PANIC, Bozidar, inz., asistent; MARTINOVIC, Borka, asistent

Study of the degree of homogenization in the mixtures of livestock fodder by applying radioactive isotopes. Technical and economical aspects. Tehnika Jug 17 no.6:Suppl.: Radioizotopi zrac 1 no.6:1050-1056a Jo '62.

1. Savetnik Savezne komisije za nuklearnu energiju, Beograd.
2. Poljoprivredni fakultet Univerziteta u Beogradu (for Ruzicic, Milosevic Panic).
3. Institut za primenu nuklearne energije u poljoprivredi, veterinarstvu i sumarstvu, Zemun (for Martinovic).

1955, 1956.

The effect of manures and fertilizing on plants (Belograd, Belgrad, Yugoslavia, 1955-1956).

570-11, L.

✓ The richness and fertility of several Serbian soil types.
Lazar Stokić and Radmila Stoković (Inst. Agr. Chem.,
Topčider-Belgrade). *Zemljopis i Poljka* 2, 19 (1953) —
Three soils have been examined: The black soil (I), the brown
soil (II), and the peat soil (III). They have been analyzed for
total and mineral N, total and assimilable P_2O_5 , total and
assimilable Ca, pH in $N KCl$, and $CaCO_3$, and granulomet-
rically. The results can be summarized as follows:
All 3 soils need $CaCO_3$, but III needs most, and I needs the
least amt. III needs org. N fertilizers, such as urea, for II
and III the right N balance can be brought about by doses
of manure only. I, as a rule, will have enough P_2O_5 , but
II and III need superphosphate. I and II need small doses
of K, but III needs rather heavy doses. W. Jacobson

2

Stasie, L.

7061
RETICULOCTIC GROWTH IN THE NEWBORN RAT AFTER
X-IRRADIATION. S. HADJIKRISTO and L. Stasie (Wars
KMFIR Inst. for Nuclear Sciences, Belgrade). Nature 170.
121: 211-212; Apr. 20.

PETROVIC, Dimitrije, Dr.; STOSIC, Ljiljana

Thorn's test in children with latent or manifest pellagra.
Higijena, Beogr. 7 no.1-4:363-368 1955.

1. Higijenski institut NR Srbije, Beograd.
(PELLAGRA, in inf. & child
diag., Thorn's test (Ser))
(ADRENAL CORTEX, funct.
Thorn's test in diag. of pellagra in child. (Ser))

YUGOSLAVIA / Diseases of Farm Animals. Diseases Caused by
Viruses and Rickettsiae.

A-2

Abs Jour : Ref Zhur - Biol., No 17, 1958, N 78953

Author : Lepcevic, E.; Nikolic, B.; Ciric, V.; Stasic, N.;
Pavlovic, O.

Inst : Not given

Title : New Febrile, Hemorrhagic and Infectious Illness in Dogs.

Orig Pub : Veterin. glasnik, 1957, 11, No 8, 752-760

Abstract : A feverish condition, bleeding from all mucous membranes
and skin hemorrhaging were basic symptoms. There were
noted: thrombo-cytopenia, increase of the coagulation
time of the blood, depression of the formation of throm-
boplastin, increase of the quantity of alpha and beta
globulins and decrease of the quantity of the gamma
globulin. The illness proceeded into an acute (death in
1 - 2 days) or subacute form. In the latter case, hemor-

Card 1/2

STOJIC, I.

STOJIC, I. Use of salt baths for heat treatment of metals. p.55.

Vol. 4, No. 3, March 1955

KEMIJAU INDUSTRIJI

SO: Monthly List of East European Accessions, (EEAL), LC, Vol.5, No.3
March, 1956

STONIS, P.

Casehardening in the Carbogene salt bath. p. 239.
Vol. 11, No. 2, 1956. TEHNIKA. Beograd, Yugoslavia.

SOURCE: East European Accessions List, (EEAL) Library
of Congress, Vol. 5, No. 8, August, 1956.

SIMIC, B. S.; STOSIC, S.; RAKOVIC, V.; LAZOVIC, Z.; MARKOVIC, R.; NIKOLIC, D.;
LALOVIC, O.; DOKMANOVIC, M.

Nutrition and nutritional conditions of female students in the home
"Vera Blagojevic". Hemoglobin, total serum proteins and hematocrit
as indices of nutritional conditions. Glas. hig. inst. 9 no.3/4:51-57
Jl-D '60.

(NUTRITION SURVEYS) (HEMOGLOBIN) (BLOOD PROTEINS)
(BLOOD CELLS) (STUDENTS)

STOGIC, Slobodan T., dr.

Nutrition survey among workers of the industrial plant "Zmaj" in Zemun and "Ivo-Lola Ribar" in Zeleznik in 1959 and 1960. Glas. hig. inst. 9 no.3/4:63-78 J1-D '60.

1. Zavod za narodno zdravlje NO grada Beograda (Direktor Dr. Rat. Bulakovic)

(NUTRITION SURVEYS) (OCCUPATIONS AND PROFESSIONS)

BABIC, Dusan; STOSIC, Zagorka

Diabetes insipidus appearing during the course of bronchial carcinoma. Srpski arh. celok. lek. 90 no.9:851-855 S '62.

1. Interna klinika A Medicinskog fakulteta Univerziteta u Beogradu Upravnik: prof. dr. Branislav Stanojevic.
(DIABETES INSIPIDUS) (BRONCHIAL NEOPLASMS)

S

SIMIC, B. S.; MARKOVIC, R.; STOSIC, S.; NIKOLIC, D.; LAZOVIC, Z.; RAKOVIC, V.;
LALOVIC, O.; DOKMANOVIC, M.

Nutrition and nutritional status of students. Some body characteristics
resulting from different forms of nutrition. Higijena 13 no.2:112-122
'61.

(NUTRITIONAL SURVEYS) (BODY WEIGHT)
(BODY HEIGHT) (STUDENTS)

100-10000

1. J. J. JARIN and Zagojka STOSIC, Internal Medicine Clinic A, Medical
Faculty of University (Institute of Clinical & Medicinal Sciences) Univer-
sity of Belgrade (Yugoslavia) Prof Dr Branislav STANOJEVIC, Belgrade.

2. "Diabetes mellitus as a Complication of Bronchial Carcinoma."

3. Veštacki glasnik za lekarsko lekarstvo, Vol 90, No 9, Sept 1951:
pp 311-313.

Abstract (English summary modified): Development of diabetes insipidus
following neurohypophyseal metastasis of bronchial carcinoma, difficult
differential diagnosis, patient (69-year-old male) long treated with
corticosteroid drugs. See also, 4 Western references.

STOSKOVA, N.N.

Metallographic study of early Russian manufactured objects.
Trudy vo ist.tekh. no.4:126-134 '54. (MLRA 7:9)
(Metallography) (Metalwork)

STOSKOVA, N.N.

A book on the development of technology in Czechoslovakia
("The history of our technology" [in Czech]. R. Stechmiller.
Reviewed by N.N. Stoskova. Vop. ist.est. i tekhn. no.1:293-
297 '56. (MLRA 9:10)

(Czechoslovakia--Technology--History)

STOSKOVA, N.N.

The "splash" method of founding in old Rus. Vop. ist.est. 1 tekhn.
no.1:151-152 '56. (MLRA 9:10)

(Founding)

STOSKOVA, N.N.

"Natural science in medieval Bulgaria" (in Bulgarian with summaries
in Russian and French). Reviewed by N.N. Stoskova. Vop. ist. est. i
tekh. no.6:210-211 '59. (MIRA 12:6)
(Bulgaria--Science)

STOSKOVA, N.N.

Location of the Tula ("Gorodishche"), first in Russia blast
furnace plants. Trudy Inst.ist.est.i tekhn. 25:201-214 '59.
(Tula--Metallurgical plants) (MIRA 13:4)

STOSKOVA, N. N.

Appearance of iron and first attempts to produce it. Trudy Inst.
ist.est.i tekhn. 33:228-248 '60. (MIRA 13:8)
(Iron--Metallurgy)

STOSKOVA, Nina Nikolayevna; FEDOROV, A.S., otv. red.; RUDNEVA, I.I.,
red. izd-va; POLENOVA, T.P., tekhn. red.

[First metallurgical plants in Russia] Pervye metallurgicheskie
zavody Rossii. Moskva, Izd-vo Akad. nauk SSSR, 1962. 104 p.
(MIRA 16:1)

(Iron and steel plants)

Role of parietal activity of the brain in spatial analysis of visual stimuli. *Neurosci. Lett.* 16:20 no.3:79-86 '65.
(MIRA 18:2)

STOSMAN, I.M.

Role of the paired activity of the midbrain in birds in the space
analysis of visual stimuli, Vest, LGU 20 no.21:77-84 '65.

(MIRA 18:12)

ACC NR: AT7006189

SOURCE CODE: UR/2822/66/000/007/0136/0141

AUTHOR: Stosman, I. M.

ORG: Department of Physiology of Higher Nervous Activity, LGU (Kafedra fiziologii vysshey nervnoy deyatel'nosti).

TITLE: Effect of brain commissurotomy on the daily activity of pigeons

SOURCE: Leningrad. Universitet. Fiziologicheskiy institut. Nervnaya sistema, no. 7, 1966, 136-141

TOPIC TAGS: biologic rhythm, central nervous system, animal physiology, bird, *animal experiment*

ABSTRACT: This study was designed to determine the effect of cerebral commissurotomy on the daily motor activity of 14 domestic pigeons (*Columba livia*). The birds were actographically monitored by means of cages with movable floors. Commissurotomy was performed according to Stosman's method (1965). Prior to operation, the intact birds were studied for ten days. Statistical results of this experiment are shown in Table 1. These data

Card 1/3

UDC: none

ACC NR. AT7006189

Table 1. Comparative characteristics of the effect of commissurotomy on the motor activity of pigeons.

Type of commissurotomy	No. of pigeons	8:00—10:00 AM		t	12:00—2:00 PM		t
		Before operation	After operation		Before operation	After operation	
* No. of movements							
Com anterior	5	72.0 ± 6.70	40.0 ± 3.15	>0.970	12.0 ± 3.40	12.0 ± 4.59	>0.970
Com posterior	4	51.7 ± 4.63	31.5 ± 2.43	>0.637	65.3 ± 4.20	34.0 ± 5.35	>0.974
Com supraoptica dorsalis	3	59.33 ± 8.68	81.33 ± 9.67	<0.391	54.6 ± 8.39	45.6 ± 4.26	<0.693
Control operation (no commissurotomy)	2	53.0 ± 5.0	59.0 ± 1.57	<0.603	63.0 ± 5.0	59.5 ± 1.57	<0.795
Maximum value of movements in mm							
Com anterior	5	9.5 ± 0.50	4.6 ± 0.32	>0.999	9.6 ± 0.55	4.2 ± 0.40	>0.999
Com posterior	4	7.5 ± 0.41	4.3 ± 0.41	>0.999	8.25 ± 0.61	4.25 ± 0.64	>0.999
Com supraoptica dorsalis	3	6.33 ± 0.43	7.33 ± 0.75	<0.344	9.33 ± 1.47	7.0 ± 1.33	<0.344
Control operation (no commissurotomy)	2	7.5 ± 0.7	7.0 ± 0	<0.356	7.5 ± 0.7	3.0 ± 0.31	<0.330

Card 2/3

ACC NR 177 00109

showed that commissurotomy of the com. anterior significantly depressed motor activity and subsequently, daily activity patterns. Maintenance of normal tonus is evidently a function of a normal volume of impulsion between both forebrain hemispheres. Orig. art. has: 1 table and 2 figures. [CD]

SUB CODE: 06/ SUBM DATE: none/ ORIG REF: 009/ OTH REF: 001/
ATD PRESS: 5117

Card 3/3

GAVRILESCU, S., dr.; FALCOIANU, A., dr.; STOSSEL, S., dr.; WHISS, S., dr.;
STREIAN, C., dr.; BRANEA, I., dr.

The carotid sinus hyperreflexivity syndrome. (a clinical and
functional study). Med. intern. (Bucur) 17 no.5:561-570
My 1965.

1. Lucrare efectuată în Clinica I medicală (conf. S. Gavrilăscu)
și Laboratul de electroencefalogramă al Clinicii de neurologie
(prof. A. Seftelă, Timisoara).

STOSZKA, J.

The effect of the suspension system of attaching tools on the development of agricultural tractors. p.87

TECHNIKA MOTORYZACJI. (Moczelna Organizacja techniczna)
Warszawa, Poland. Vol.9, no.2, Mar. 1959

Monthly List of East European Accessions Index, (LEAI) LC, vol.5, no.6
June 1959
Incl.

(2) 7
CZECHOSLOVAKIA

HRIVNAN, J; SPOTA, A; JOLLEAL, J; SUBINOVA, A.

Research Institute of Agrochemical Technology (Forschungs-
institut fuer agrochemische Technologie), Bratislava
(for all)

Prague, Collection of Czechoslovak Chemical Communications,
No 10, 1965, pp 3272-3277

"Gas Chromatographic Determination of Chloroformic Acid
Alkylesters."

Method of testing soil fungicides. Milošev Tomšan,
Zdeněk Šlota, and Miroslav Škrdal (Výzk. Ústav Agronom.
Technol., Bratislava, Czech.). *Biologus* 11, 12-21(1976). --
A method is described by using as test objects cauliflower
and *Rhizomania solani*. Fungicidal, phytotoxic, and herbicidal
properties of 10 conc. groups are evaluated.

L. J. Gylánck

CZECHOSLOVAKIA/Chemical Technology - Chemical Products and
Their Application - Pesticides.

H-18

Abs Jour : Ref Zhur - Khimiya, No 3, 1958, 9118

Author : Toman Miroslav, St'ota Zdenek

Inst : -

Title : The Activity of Pentachloranisole Against Tilletia foetida
(Wallr.) Liro in Field Tests.

Orig Pub : Pol'nokhospodarstvo, 1957, 4, No 3, 583-586

Abstract : In field tests a protectant containing pentachloranisole
was found to be less reliable against Tilletia foetida
(Wallr.) Liro on winter wheat, than hexachlorebenzene
and pentachloro-nitrobenzene, at dosages used in practice
(200-400 mg per 1 kg seed).

Card 1/1

3

CZECHOSLOVAKIA / Chemical Technology. Pesticides. H-18

Abs Jour: Ref Zhur-Khimiya, No 23, 1958, 73822.

Author : Magdolen, T., Stota, Z.

Inst : Not given.

Title : The Preparation of 1,2,4,5-Tetrachlorobenzene
by Continuous Method.

Orig Pub: Chem prumysl. 1958, 8, No 1, 11-13.

Abstract: For the preparation of 1,2,4,5-Cl₄C₆H₂ (II), which is a mixture of isomers, obtained by dehydrochlorination of non-toxic isomers of HCCH /sic/ hexachlorocyclohexane, the chlorine is introduced in amount of 40% in respect to the amount theoretically needed for the total conversion of II into I. In the first place, non-symmetrical II is chlorinated, which transforms to I. The chlorination is carried out at 100°C. in the pre-

Card 1/5

29

CZECHOSLOVAKIA / Chemical Technology. Pesticides.

H-18

Abs Jour: Ref Zhur-Kniniya, No 23, 1958, 78822.

Abstract: I and highly chlorinated derivatives 4; underneath the C, Cl_2 is delivered at a rate of 270 grams/hour. The chlorination is carried out at 100-120°C. The HCl produced is diverted into the absorption column. The product is transferred from the bottom of RC into a crystallization unit, where it is cooled to 15°C. The crystals are filtered off, washed with III, filtered off once again and dried. For the chlorination over a period of 3 hours, 5,100 grams of II and 810 grams of Cl_2 were needed. There was obtained 2,500 grams of the product, from which after washing with 2,500 grams of III, 2,120 grams of I was separated in a 35% conversion, having a m. p. of 133-134°C. The pilot plant installation

Card 3/5

30

COLLID / Chemical Technology. Chemical processes and H-18
their applications. Fertilizers.

Russ Jour: Ref Zhur-Zhimiya, No 3, 1959, 9465.

Author : St'ota, Z., Toman, H.

Inst : Not given.

Title : A Study of the Action of Some Hexachloro Benzene
Derivatives on *Tillotia Focida* (Wallr.) Liro.

Art Pub: Biologia, 1958, 13, No 2, 124-126.

Abstract: Fungicidal activity was tested of hexachlor- (I),
and pentachloronitrobenzene (II); 1,2-, 1,3- and
1,4-dinitrotetrachlorobenzene; pentachloraniline;
tetrabrom-*m*-xylene; pentachloranisole; dimethyl
esters of pentabrom- and pentachloropyrocatechin;
1,3-dinitro 2, 4, 5-trichlorobenzene on wheat grains
infected by *Tillotia Focida* (Wallr.) Liro. I and
II are effective. -- I. Milachtyn.

Card 1/1

Distr: hE2c(j)/hE3d

~~Trichlorobenzene from hexachlorocyclohexanes. Dženda~~

~~Vrágala, Zdeněk Štěpán, and Jaroslav Aurbach Czech~~

~~92,749, Nov. 15, 1959. The title procedure is carried out in~~

~~several steps at normal pressure with catalysis by alk.~~

~~hydroxides.~~

~~L. J. Velhuck~~

1/
/- 29(NB)
2.

The identification of 2,4,5 trichlorobenzene sulfonyl chloride and its derivatives. Zdeněk Štola (Výzkumný ústav agrochem. technol., Bratislava-Predmestí, Czech.). Chem. zvesti 13, 82-7 (1959). — 2,4,5- $\text{Cl}_3\text{C}_6\text{H}_2\text{SO}_2\text{Cl}$ was prepd. by sulfonation of 1,2,4- $\text{C}_6\text{H}_3\text{Cl}_3$ and treatment with PCl_5 or by direct sulfochlorination and detd. as the amide, γ -chloroanilide, Ph ester, p - ClC_6H_4 ester, and 2- C_6H_5 ester of 2,4,5- $\text{Cl}_3\text{C}_6\text{H}_2\text{SO}_2\text{H}$. 2,4,5- $\text{Cl}_3\text{C}_6\text{H}_2\text{SO}_2\text{H}$ was detd. as 2,4,5- $\text{Cl}_3\text{C}_6\text{H}_2\text{SO}_2\text{Cl}$ (NO₂), 2,4.

7

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2 May
4E 3d
4E 2c ji

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11

JP

STOTA, Z.

On some N-alkyl-2,4,5-trichlorobenzenesulfonamides. Coll Cz Chem 27
no.8:2015-2017 Ag '62.

1. Forschungsinstitut für agrochemische Technologie, Bratislava.

HRIVNÁK, Jan; MICHALEK, Milan; ŠTOTA, Zdeněk

Determining the phthalimide content from the melting point of binary mixture. Chem pruz 13 no.1:18-19 Ja '63.

1. Vyskumny ustav agrochemickej technologie, Bratislava.

KRSEK, J.; STOTA, Z.

Di- and trinitrophenyl ester of some N-substituted dithio-
carbamide acids. Coll Cz Chem 28 no.11:3159-3162 N°63.

1. Forschungsinstitut für agronomische Technologie, Bratislava.

ST TA, Z.; SCHIESSL, O.

Preparation of 2,3-dichlorophenol. Coll Cz Chem 29 no.4:
1077-1078 Ap '64.

1. Research Institute of Agrochemical Technology,
Bratislava.

L 1630-66

ACCESSION NR: AP7024267

CZ/0043/64/000/009/0692/0697 ³⁰B

AUTHOR: Hrivnak, J. (Grivnyak, Ya.) (Engineer, Candidate of sciences) (Bratislava);
Steta, Z. (Shteta, Z.) (Engineer) (Bratislava)

TITLE: Determination of isomers of trichlorobenzene by gas chromatography

SOURCE: Chemické zvesti, no. 9, 1964, 692-697

TOPIC TAGS: isomer, gas chromatography, benzene, chlorinated organic compound

ABSTRACT: A method is described of determining all isomers of dichlorobenzene, trichlorobenzene, and tetrachlorobenzene in the technical-grade trichlorobenzene by means of gas chromatography. 1,1,1-trichloro-2-methyl-propane-2-ol was used as the "inner standard. "We thank Eng. M. Livarov for execution of fractionation analysis and graduate chemist E. Sohler for technical assistance." Orig. art. has: 1 figure, 1 graph, and 3 tables.

ASSOCIATION: Vyskumny ustav agrochemickej technologic, Bratislava (Research Institute for Agrochemical Technology)

SUBMITTED: 27 Jan 64
NR REF SOV: 000

ENCL: 00
OTHER: 007

SUB CODE: CC, GC
JPRS

Card 1/1

L 33691-66 EWP(1) RM/JH

ACC NR: AP6024208

SOURCE CODE: CZ/0043/65/000/011/0846/0849

AUTHOR: Grivnak, Jan--Grivnyak, Ya. (Engineer; Candidate of sciences; Bratislava);
Stota, Zdenek--Shtota, Z. (Engineer; Bratislava); Dolesal, Josef--Doleshal, Ya. (Engineer; Bratislava) B

ORG: Research Institute for Agricultural Chemical Technology, Bratislava (Vyskumny
ustav agrochemickoj technologie)

TITLE: Separation of alkyl carbonates of 2-phenyl-4,6-dinitrophenol¹ by gas
chromatography

SOURCE: Chemicks zvesti, no. 11, 1965, 846-849

TOPIC TAGS: gas chromatography, chemical separation, organic nitro compound,
analytic chemistry, chemical purity

ABSTRACT: Direct determination of n- and iso-alkyl (C1-C8)-
carbonates of 2-phenyl-4,6-dinitrophenols was studied by means
of gas chromatography. Polyethylene-glycol adipate, Apreson L,
and silicon grease SE 301 were used as anchor phases, nitrogen
as carrier gas, and detection was made by a flame ionization
detector. Practically, the method is suitable for determination
of purity and the analysis of some products. Orig. art. has: 2 figures
and 1 table. [JPMS]

SUB CODE: 07 / SUBM DATE: 04Mar65 / ORIG REF: 002 / OTH REF: 012

Cord 1/1 PP

1459

СИДАНОВ, В.

Cause of stripes forming on cotton material and how to partially remove them after tinting. ;. 25. LEKA PROMISHLENOST. Sofiya. Vol. 5, no. 2. 1956.

SOURCE: East European Accessions List. (EEAL) Library of Congress. Vol. 5, No. 8, August 1956.

KALASHNIKOV, N. V.; STOTHIY, L. R.

International unit system. Kesh. obuv. prom. 4 no.10:31-34
0 '62. (MIRA 15:10)

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(Units)

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STOTIK, A.M.

Use of plastics abroad. Zhivotnovodstvo 20 no.9:33-35 S '58.
(MIRA 11:10)

(Plastics) (Farm equipment)